

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/823,833	03/30/2001	Steven Lemay	IGT1P118/P-303		
22434	7590 05/27/2004		EXAMINÊR		
	EAVER & THOMAS	ENATSKY, AARON L			
P.O. BOX 778 BERKELEY, CA 94704-0778			ART UNIT	PAPER NUMBER	
			3713		

DATE MAILED: 05/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

	· · · · · · · · · · · · · · · · · · ·	Application No.		Applicant(s)		1			
Office Action Summary		09/823,833		LEMAY ET AL.	C	\int_{Γ}			
		Examiner		Art Unit					
		Aaron L Enatsky		3713					
Period fo	The MAILING DATE of this communication app or Reply	ears on the cover s	heet with the co	errespondence ad	ldress				
THE - Exte after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Insions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. It is period for reply specified above is less than thirty (30) days, a reply of period for reply is specified above, the maximum statutory period we are to reply within the set or extended period for reply will, by statute, reply received by the Office later than three months after the mailing ed patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however within the statutory minimularity will apply and will expire SIX cause the application to be	or, may a reply be time um of thirty (30) days ((6) MONTHS from the ecome ABANDONED	ely filed will be considered timel ne mailing date of this c (35 U.S.C. § 133).					
Status									
1)⊠	Responsive to communication(s) filed on 12 M	arch 2004.							
2a)	This action is FINAL . 2b)⊠ This action is non-final.								
3)	☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
	closed in accordance with the practice under E	Ex parte Quayle, 19	35 C.D. 11, 450	3 O.G. 213.					
Disposit	ion of Claims								
4) 🖂	Claim(s) 37-54 and 58 is/are pending in the ap	plication.							
	4a) Of the above claim(s) <u>55-57</u> is/are withdrawn from consideration.								
5)	5) Claim(s) is/are allowed.								
· · · · · · · · · · · · · · · · · · ·	☑ Claim(s) <u>37-54, 58</u> is/are rejected.								
·	Claim(s) is/are objected to.	1tii	a = 4						
8)[_]	Claim(s) are subject to restriction and/o	r election requireme	ent.						
Applicat	ion Papers								
9)[The specification is objected to by the Examine	r.							
10)	The drawing(s) filed on is/are: a) acce	epted or b) 🗌 objec	cted to by the E	xaminer.					
	Applicant may not request that any objection to the	•	-						
11)	Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the Ex								
	under 35 U.S.C. § 119								
	Acknowledgment is made of a claim for foreign	oriority under 35 LI	ISC & 119(a)_	(d) or (f)					
	☐ All b)☐ Some * c)☐ None of:	phoney under 60 C	7.0.0. 3 110(a)	(a) 01 (1).					
1. Certified copies of the priority documents have been received.									
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the prior	rity documents have	e been received	d in this National	Stage				
	application from the International Bureau	u (PCT Rule 17.2(a))).						
* (See the attached detailed Office action for a list	of the certified copi	ies not received	d.					
Attachmen		∧ □	longious Commerce of	DTO 442\					
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	Pa	terview Summary (aper No(s)/Mail Dat	e					
3) Infor	mation Disclosure Statement(s) (PTO-1449 or PTO/SB/08) or No(s)/Mail Date		otice of Informal Pa her:	tent Application (PT0	O-152)				
S Patent and T	rademark Office	···	 -						

DETAILED ACTION

Response to Amendment

Examiner acknowledges receipt of the Response to Office Action on 03/12/04.

Election/Restrictions

Newly submitted claims 55-57 are directed to an invention that is independent or distinct from the invention originally claimed for the following reasons: Claims are directed to a method of code authentication where code is transmitted multiple times between a game machine controller and a peripheral device, then compared at a game machine controller for authentication purposes.

Since applicant has received an action on the merits for the originally presented invention, this invention has been constructively elected by original presentation for prosecution on the merits. Accordingly, claims 55-57 withdrawn from consideration as being directed to a non-elected invention. See 37 CFR 1.142(b) and MPEP § 821.03.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 51 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant has required that a gaming machine does not need to physically access a peripheral device. Examiner is unsure of the exact meaning of no physical access and has

interpreted the claim to mean that the peripheral device does not need to be built into the gaming machine or is remote from the gaming machine. Examiner believes the plain meaning of no physical access would raise possible enablement issues, as no physical access would mean the lack of communication between the two devices.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject mailer sought to be patented and the prior art are such that the subject mailer as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 37-40, 42, 44, 46-49, 50-54, 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,263,392 to McCauley in view of Request For Comments: 951 by Croft et al. ("Croft"). In regard to claims 37, 42, 48, and 58 McCauley teaches a method and apparatus for interfacing peripheral devices to a host computer (Abstract). The peripheral devices include controllers and monetary authentication devices (Abstract), which effect operability of the host game machine. The peripheral devices also contain control code for interfacing with the host machine and other peripheral devices (1:34-2:20). Furthermore, the system was built to meet a long felt need to increase energy efficiency and reduce cost and complexity of computer interface hardware designs (2:35-38). McCauley does not however detail a host device providing control code necessary to operate peripheral devices. Croft teaches a client machine connected to a server machine in which the client machine sends a BOOTP or bootstrapping request to the

Application/Control Number: 09/823,833

Art Unit: 3713

server and the server provides a bootfile, otherwise known as operating code, to be loaded into memory and executed by the client machine (Page 1). Croft teaches such a system to provide an unattended power-up to a machine that lacks permanent operating code storage (Page 1). Other well-known reasons behind remote bootstrapping is efficient software updating without requiring manual software updating on every peripheral device in use. Croft's steps include transmitting control code from a host in response to a client request, storing control code at the client machine, and executing control code at the client machine (Page 1-2). One would be motivated to modify McCauley to include automatic operating code downloads in peripheral devices taught by Croft because automated system maintenance would aid in reducing cost and complexity of computer interface hardware designs, which is a major impetus for McCauley's system design. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley to use the automatic operating code downloads taught by Croft to reduce cost and complexity of the peripheral devices. Additionally, in the case of updated software, Applicant's additional requirement for a portion of code different from previous code would be satisfied.

In regard to claim 38 and 46, Croft teaches that a client device need only contain code enough to request operating control code from a host device (Page 1).

In regard to claims 39-40, Croft teaches downloading control code during boot operation (Page 1), which would happen during every system power-up including removing power from the device.

In regard to claim 44, Croft teaches a controller identifies client device to transmit control code (Page 3).

Application/Control Number: 09/823,833

Art Unit: 3713

In regard to claim 47, Croft teaches use read-only memory for storing resident code (Page 1).

In regard to claim 49, McCauley teaches using USB as one of plurality of interfaces for connecting peripheral devices to a host machine (2:40-62).

In regard to claim 50, McCauley teaches game machine (Fig. 2, ref. 4) controls peripheral devices (Fig. 2, ref. 40, 42, 44, 46), which would be considered a master controller.

In regard to claim 51, McCauley, teaches peripheral devices are remote from the gaming machine (Fig. 2) so they do not need to physically access the gaming machine.

In regard to claim 52, McCauley teaches that the system can have multiple peripheral devices of the same type (Fig. 2) or a variety of different devices (6:23-34).

In regard to claims 53-54, McCauley teaches that the peripheral devices can be connected via parallel or serial lines in bi-direction communication (6:23-46). In the case of parallel connections, the devices can communicate or be given data at the same time.

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCauley in view of Croft as applied to claims 3 7-40, 42, 44, 46-49 above, and further in view of US Patent No. 6,052,779 to Jackson et al. ("Jackson"). McCauley in view of Croft teaches the limitations as discussed above, but does not teach sending a polling signal to peripheral devices and peripheral devices responding by sending a control code request. Jackson teaches a polling request sent to client systems from a controlling system that causes client systems to respond by sending a control code request to the controlling system (Abstract). Jackson teaches such an operation to allow client device startup before a target start-up time (Abstract). One would be motivated to modify McCauley in view of Croft to use the remote polling taught by Jackson to allow greater remote control over peripheral devices which would further reduce the maintenance costs by

through further automation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley in view of Croft to include remote polling taught by Jackson for increased cost reductions.

Claims 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCauley in view of Croft as applied to claims 37-40, 42, 44, 46-49 above, and further in view of US Patent No. 5,802,592 to Chess et al. ("Chess"). McCauley in view of Croft teaches the limitations as discussed above, but does not teach control code authenticating before transmitting control code or periodically verifying control code. Chess teaches a system and method for protecting integrity of control code (Abstract), which involves authenticating control code during the bootstrapping process (2:51-67). Chess also teaches regularly verifying authenticity of the control code contents (Abstract). One would be motivated to modify McCauley in view of Croft to use bootstrapping authentication taught by Chess as Chess teaches that verifying control code is important to detect accidental or malicious code changes (1:10-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley in view of Croft to use bootstrapping authentication taught by Chess to increase system security.

Response to Arguments

Applicant's arguments with respect to claims 37-54, 58 have been considered but are not considered persuasive.

Use of Non-analogous Art in the Gaming Machine Industry: Applicant holds that combinations used in the Examiner's rejection comprise non-analogous art in the gaming

Art Unit: 3713

code to remote devices.

machine industry. In response to applicant's argument that McCauley, Croft, Jackson, and Chess are nonanalogous art, it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See In re Oetiker, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, the references in question predominantly deal with features previously known in peripheral devices or devices remote from a main computer. Applicant provides arguments toward the notion that because gaming machines come under very different and stringent government regulatory control versus personal computers (PCs), PC technology does not apply to Applicant's invention. For one, McCauley teaches peripheral devices in a PC game machine, including credit and coinop devices such as found in gaming machines (Abstract). McCauley also details that the method of communication between the game machine and the peripheral device can be formatted data and signal packets according to a pre-established communications standard such as known in the art (10:20-28). Accordingly, Examiner applied elements from known communication standards as suggested by McCauley to arrive at Applicant's invention. Thus, Examiner believes that the prior art was in a field of Applicant's endeavor, wherein the prior art teaches sending operating

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron L Enatsky whose telephone number is 703-305-3525. The examiner can normally be reached on 8-6 M-Th.

Art Unit: 3713

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ALE